

REMARKS

In response to the final Official Action of April 14, 2009, claims 1, 4-6, 12, 15, 16, 20, 26, 27, 29-33, and 35 have been amended in a manner which is believed to particularly point out and distinctly claim the invention.

In particular, the following amendments have been made:

- It has been clarified in claim 1 that the first connection and the second connection are both connections between the same first and second entities. Claims 20 and 29 have been amended accordingly.
- Furthermore, independent claim 1 has been amended to state that checking is performed before a second connection has been requested, while it has been clarified that resources for a transmission between the first entity and the second entity are jointly used by the first connection and the second connection after establishment of the second connection. The phrase "so far not requested second connection" has been cancelled. Claims 20 and 29 have been amended accordingly.
- To bring claims 2, 4 and 5 into conformity with their base claim (claim 1), these claims have been amended to merely refer to controlling the use of at least one portion of said transmission resources. It has been cancelled from claims 2, 4 and 5 that these transmission resources are used by at least one of said first and second connections.
- Clarity of claim 6 has been enhanced by amending the claim to state that checking and controlling are performed before said first connection and said second connection have been established instead of referring to checking and controlling being performed before said first and second connection have been established. Claim 33 has been amended accordingly.
- In order to enhance clarity of claim 12, said claim has been amended to explicitly refer to said first connection and said second connection instead of merely referring to connections. Claim 35 has been amended accordingly.

- So as to provide an antecedent basis for the transmission resources control instance cited in claim 15, the features of claim 9 have been incorporated into amended claim 15.
- Instead of citing a bearer, in amended claims 15-16 and 26-27 a radio bearer is now always referred to.
- A passage in former claim 16 reads "...said transmission resources control instance monitors the connections provided by said radio bearer and, based at least one said monitored connections and on hardware profiles of said mobile station". In view of the paragraph of the description spanning pages 16 and 17 it is however clear that it should in fact read "...based at least on said monitored connections". This typing error has been rectified.
- To bring claims 30-32 into conformity with their base claim (claim 20), these claims have been amended to state that not the processor but the controller is configured to control the use of at least one portion of said transmission resources.

It has been cancelled from claims 30-32 that the controller is configured to control the use of at least one portion of said transmission resources by at least one of said first and second connections. Thus, according to amended claims 30-32, the controller is merely configured to control the use of at least one portion of said transmission resources.

Claim Rejections - 35 USC §102

At section 5, claims 1, 4-9, 11-13, 18, 20-23, 28, 29, and 31-38 are rejected under 35 USC §102(b) as anticipated in view of WO 00/49824, Naghian.

With respect to claim 1, it is asserted that Naghian discloses a method comprising the actions recited therein with specific reference to page 6, lines 12-19 and 29-34 of Naghian.

Naghian discloses a method for admission control in a cellular telecommunication system. Bearer requests resulting in the load being under a first predetermined limit are admitted. If a bearer request would result in the load being over the first predetermined limit, the admission control entity tries to make room for the bearer request, i.e. release

resources without degrading the quality of service (QoS) provided for the existing bearers (see abstract). For this purpose, an admission control entity calculates a result load estimate based on the current load and the bearer request, wherein the resulting load estimate comprises the transmission i.e. interference powers of both existing bearer and the new bearers (see Naghian, page 6, lines 12-15).

Subject-Matter of the Invention

The present invention relates to controlling the use of transmission resources. It is checked, before a second connection between a first entity and a second entity has been requested, whether QoS requirements of a first connection between said first entity and said second entity can still be guaranteed when transmission resources for a transmission between said first entity and said second entity are jointly used by the first connection and, after establishment of said second connection, said second connection. The use of at least one portion of the transmission resources by the first connection is then controlled accordingly.

Having clarified in the amended independent claim 1 that the first connection is a connection between a first entity and a second entity and that the second connection is also a connection between said first entity and said second entity and with amended claim 1 now explicitly reciting that resources for a transmission between the first entity and the second entity are jointly used by said first connection and said second connection after establishment of said second connection, it is respectfully submitted that it is now clear that claim 1 is not anticipated by Naghian.

In response to the comment that according to the present invention it is not even required that a second connection will ever be requested and that, for examination purposes, the second connection will never be requested, the following is respectfully submitted:

It is noted that amended claim 1 clearly states that two connections between a first entity and a second entity may be established. This is due to the fact that claim 1 now explicitly states that resources for a transmission between the first entity and the second

entity are jointly used by said first connection and said second connection after establishment of said second connection (see support in the application as filed, including Figure 3 and page 34, line 4 through page 35, line 8).

If, according to the present invention, it were not possible to also establish the second connection, it would not make any sense to check whether quality of service requirements of a first connection can still be guaranteed when transmission resources for a transmission between the first entity and the second entity are jointly used by said first connection and, after establishment of said second connection, said second connection.

Clearly, resources for a transmission between the first entity and the second entity being jointly used by said first connection and, after establishment of said second connection, said second connection does however not necessitate two connections, i.e. the first connection and the second connection, being established at every point in time.

To name but one example, in an illustrative scenario, the first entity may be a mobile station and the second entity may be a network (see, for instance, page 23 of Applicant's specification and Figure 1: client 100 and network 103). Upon switching on a previously inactive mobile station, neither a first connection nor a second connection may be established. Once the operating system of the mobile station has been booted up, a connection, e.g. a packet-switched connection, between the mobile station and the network may be established. However, a second connection between the mobile station and the network, e.g. a circuit-switched connection, does not necessarily have to be established immediately as well. For instance, if a user has not yet requested a second connection to be established or if the mobile station is currently associated with a cell that does not support two simultaneous connections (see page 3, second paragraph of Applicant's specification), a second connection may at that moment not be established.

Yet, according to amended claim 1 at least in some scenarios of use, transmission resources for a transmission between a first entity and a second entity are jointly used by a first connection and a second connection.

According to Applicant's invention as defined by amended claim 1, checking if joint usage of transmission resources by a first connection and a second connection still allows

quality of service requirements of the first connection to be guaranteed and is performed before a second connection has been requested.

For instance, said checking and also controlling the use of at least one portion of said transmission resources by said first connection may be performed prior to or during the establishment phase of said first connection. An advantage of this approach may be that, when the possibility of a future establishment of a second connection that uses the transmission resources jointly with the first connection is considered during the establishment of said first connection, when the QoS requirements of said first connection and the corresponding portion of transmission resources is negotiated between the entities that establish said first connection, this future establishment of said second connection may then take place seamlessly (see page 10, third paragraph of Applicant's specification).

The feature that checking whether quality of service requirements of the first connection can still be guaranteed when transmission resources for a transmission between the first entity and the second entity are jointly used by said first connection and, after establishment of the second connection, said second connection is performed before a the second connection has been requested may not be misunderstood as prohibiting that a second connection is ever requested.

Naghian neither teaches nor renders obvious the feature of checking, before a second connection has been requested, if joint usage of transmission resources by a first connection and, after establishment of the second connection, the second connection still allows quality of service requirements of the first connection to be guaranteed, thus taking into account a possible future second connection.

Naghian only considers scenarios where one or more bearers (so-called existing bearers) have already been established, and a request for one or more further bearers occurs. Only in response to such a request for one or more further bearers, is it checked if the load estimate is higher than the predetermined limit, and in response to this decision, it is decided if the bearer requests can be granted or if the procedures for handling critical

load and overload situations have to be performed (Naghian, page 6, lines 6-31). A potential future bearer request is however not considered in these procedures at all.

For instance, page 6, line 6 of Naghian reads:

“In the first step 105, a bearer request is received by the admission control entity.” (emphasis added)

Moreover, line 9 on page 6 of Naghian reads:

“As a response to receiving the bearer request...” (emphasis added)

It is respectfully submitted that the passage extending from line 12 to line 19 on page 6 of Naghian, does not teach to perform transmission resource checking before a second connection has been requested. Instead, it is explicitly disclosed to only act according to requests.

Furthermore, said passage of Naghian also does not teach a first connection between a first entity and a second entity and a second connection between said first entity and said second entity. The admission control method described in Naghian pertains to controlling the use of transmission resources of newly requested bearers in the presence of existing bearers (Naghian, page 6, lines 6-15; page 7, lines 4-8) within a control region, e.g. a cell or a whole radio access network (Naghian: page 3, lines 13-18), controlled by a single admission control entity. Thus, Naghian does not anticipate controlling transmission resources that may be used jointly by two connections between the same set of entities.

It is therefore respectfully submitted that amended claim 1 is neither anticipated nor suggested by Naghian.

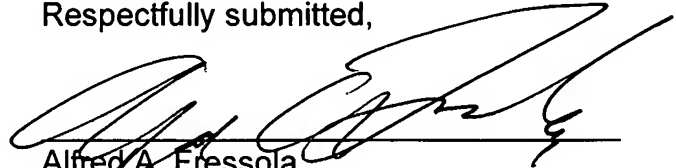
Independent claims 20 and 29 have been amended in a manner similar to claim 1 and are also believed to be neither anticipated nor suggested by Naghian for the same reasons as presented above with regard to amended claim 1.

Since each of the independent claims of the present application are believed to be allowable, it is respectfully submitted that the dependent claims thereto are also allowable at least in view of such dependency whether the claims are rejected at section 5 as

anticipated by Naghian or rejected at sections 10-13 as suggested by Naghian further in view of additional cited art.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Alfred A. Fressola', written over a horizontal line.

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